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TP 1624

Marine Casualty Investigations

Enquêtes sur les accidents maritimes

Investigation Report to the Minister pursuant to sections 542 or 545 of the Canada Shipping Act

Rapport d'investigation au Ministre conformément aux articles 542 ou 545 de la Loi sur la marine marchande du Canada

Canada

Ce rapport est aussi disponible en français.

REPORT OF INVESTIGATION INTO THE CIRCUMSTANCES ATTENDING THE GROUNDING OF THE CANADIAN FISHING VESSEL "BARRY & TRINA" AND THE LOSS OF "THE MYERS III", WITH FIVE PERSONS ABOARD, OFF CODROY, WEST COAST OF NEWFOUNDLAND, DURING A STORM ON JANUARY 24, 1987.

REPORT No. 486

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TABLE OF CONTENTS

CHAPTER 1

Sketch of a typical fishing vessel engaged in the cod fishery 1

Preamble 3

CHAPTER 2

List of fishing vessel casualties 5

Positions of vessels involved in the casualty 6

Reports of Investigations:

1. "THE MYERS III" 7
2. "BARRY & TRINA" 22

CHAPTER 3

General Analysis

1. Cod fishery 31
2. Weather 33
3. Vessel icing 38
4. Search & Rescue 40

CHAPTER 4

General Findings 45

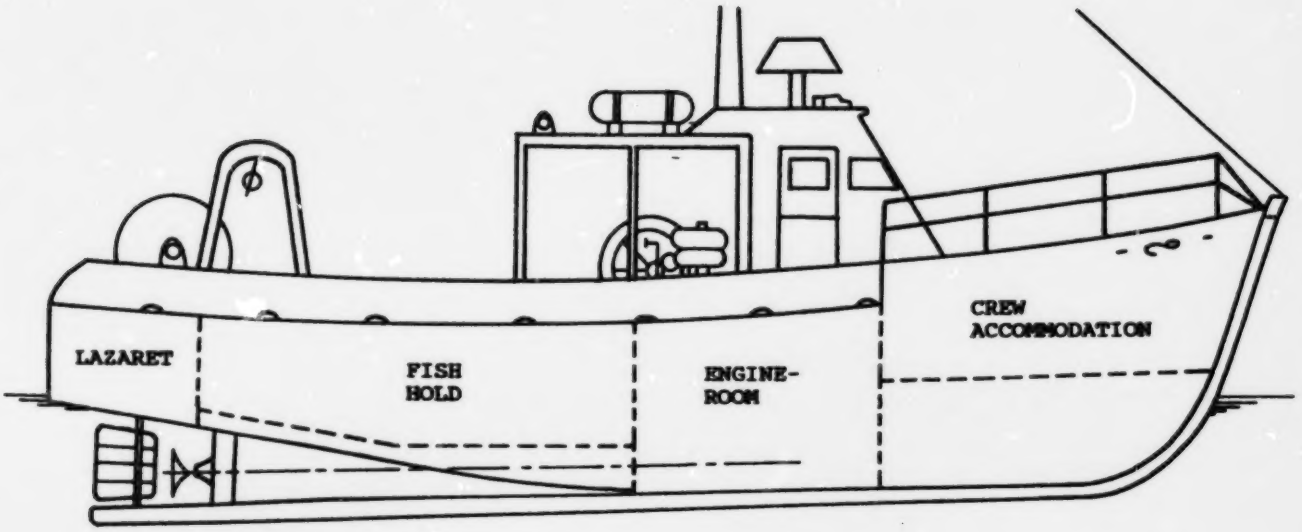
Glossary 47

Annex I - Life Saving Equipment Regulations 48

Annex II - Canadian ground-fish inshore / offshore allocations 49

- Annual landings Atlantic Coast 50

- Annual landings by vessel size 50



TYPICAL VESSEL ENGAGED IN THE COD FISHING INDUSTRY

Preamble

On January 24, 1987, ten fishing vessels departed Codroy Harbour, Nfld., bound for the Cod fishing grounds in (fishing) area '4R'. Of the ten vessels, two involved in the casualty were "THE MYERS III" and the "BARRY & TRINA". The "BARRY & TRINA", with no catch on board grounded near the entrance to Codroy Harbour in storm force winds whilst attempting to seek shelter and "THE MYERS III", heavily laden with fish, sank with the loss of all five lives. These casualties were the subject of considerable media comment.

As the two casualties occurred in the same general area but for different reasons and over the same general time frame, both investigations are combined into one report. Further, these casualties again emphasize the need to give careful consideration to the existing and forecast weather conditions in determining

(a) whether the vessel can safely proceed to sea, and

(b) the extent to which the vessel should be loaded with a catch of fish prior to her departure from the fishing grounds to seek shelter.

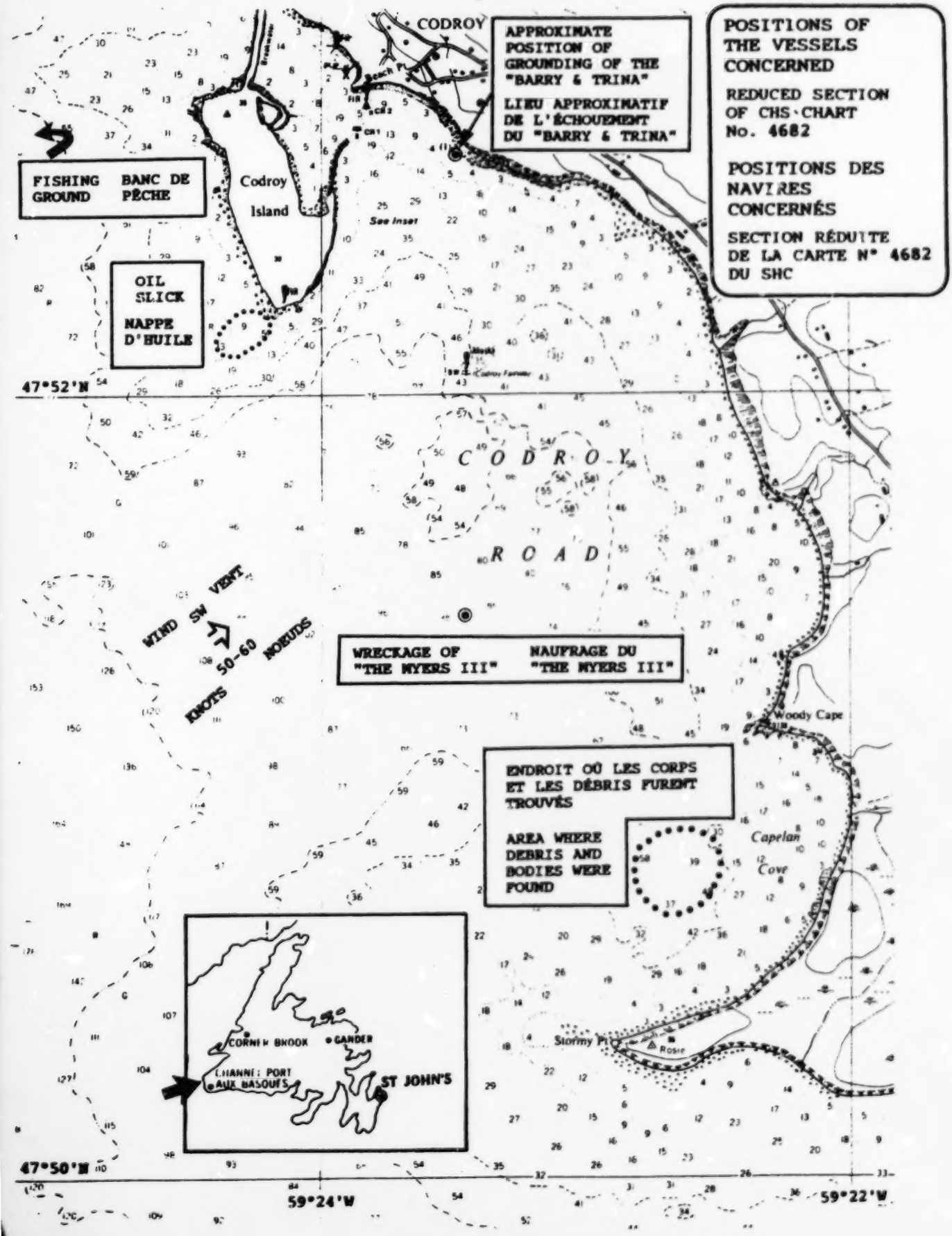
NOTE: 1. All times in this report are expressed in Newfoundland Standard time (UTC minus 3½ hours).

2. A glossary of terms and abbreviations can be found following the General Findings in this report.

CHAPTER 2

LIST OF FISHING VESSEL CASUALTIES

1. "THE MYERS III"
2. "BARRY & TRINA"


CODROY
APPROXIMATE POSITION OF GROUNDING OF THE "BARRY & TRINA"
LIEU APPROXIMATIF DE L'ÉCHOUEMENT DU "BARRY & TRINA"
POSITIONS OF THE VESSELS CONCERNED
REDUCED SECTION OF CHS CHART No. 4682
POSITIONS DES NAVIRES CONCERNÉS
SECTION RÉDUITE DE LA CARTE N° 4682 DU SHC
FISHING GROUND
BANC DE PÊCHE
Codroy Island
See Inset
OIL SLICK
NAPPE D'HUILE
47°52'N
C O D R O Y
R O A D
WIND SW VENT
50-60 KNOTS NOEUDS
WRECKAGE OF "THE MYERS III"
NAUFRAGE DU "THE MYERS III"
ENDROIT OÙ LES CORPS ET LES DÉBRIS FURENT TROUVÉS
AREA WHERE DEBRIS AND BODIES WERE FOUND
Woody Cape
Capelan Cove
Stormy Pt
Rosie
CORNER BROOK
GANDER
L'ANSE AUX BASQUES
ST JOHN'S
47°50'N
59°24'W
59°22'W

REPORTS OF INVESTIGATIONS

1. LOSS OF "THE MYERS III" OFF CODROY, WEST COAST OF NFLD., JANUARY 24, 1987.

Particulars of Vessel

Name	"THE MYERS III"
Official Number	392043
Port of Registry	St. John's, Nfld.
Call Sign	VC 2215
Gross Tonnage	26.58
Net Tonnage	11.84
Length	13.84 m
Breadth	4.72 m
Depth	1.8 m
Draught (at time of incident)	Unknown
Type	Wooden Dragger
Built	1979
Rebuilt	1985
Propulsion	1 Volvo Penta Diesel Engine, 6 cyclinder, 155 b.h.p., driving a single fixed-pitch propeller
Cargo	Codfish approx. 21,770 kg
Crew	5
Owner	David Myers Bartlett's Harbour Newfoundland

Navigational Equipment

The following navigational equipment was reported to be on board:

Radar	Furuno
Echo Sounder	Furuno
VHF Radio (1)	Philips
SSB Radio	Not operational
Compass	Magnetic

The sinking of "THE MYERS III" with the loss of all lives precluded her examination and consequently the operational status of the navigational equipment at the time of the casualty is not known.

Background

On the morning of January 24, 1987, about ten fishing vessels, including "THE MYERS III", departed Codroy Harbour bound for the cod fishing ground off Codroy Island, south-west coast of Newfoundland, with five crew members on board, four of whom were brothers.

In the afternoon, the vessel was heavily laden with codfish when suddenly the weather rapidly deteriorated resulting in the loss of "THE MYERS III" and all her crew members. Two bodies were subsequently recovered.

Particulars of Deceased/Missing

1. Name : Ewan Hynes
   Position aboard vessel : Deck-hand
   Age : 24
   Address : Bartlett's Harbour, Nfld.
   Body recovered : January 26, 1987
   Cause of death : Asphyxia due to drowning

2. Name : Clarence Myers
   Position aboard vessel : Deck-hand
   Age : 36
   Address : Bartlett's Harbour, Nfld.
   Body recovered : January 27, 1987
   Cause of death : Asphyxia due to drowning

3. Name : Joseph Myers
   Position aboard vessel : Skipper
   Age : 37
   Address : Bartlett's Harbour, Nfld.
   Cause of death : Missing, presumed drowned

4.	Name	: David Joseph Myers
	Position aboard vessel	: Owner/Operator
	Age	: 34
	Address	: Bartlett's Harbour, Nfld.
	Cause of death	: Missing, presumed drowned
5.	Name	: James Myers
	Position aboard vessel	: Deck-hand
	Age	: 31
	Address	: Bartlett's Harbour, Nfld.
	Cause of death	: Missing, presumed drowned

Narrative

In mid-October, 1986, the small wooden dragger "THE MYERS III" was lifted out of the water at Isle aux Morts Marine Service Centre for winter storage.

At about 1330 on January 22, 1987, the vessel was launched to commence fishing for cod in Area 4R around Codroy Island. Area 4R was opened for cod fishing on January 1, 1987, and was to close on December 31, 1987, or until any fishing vessel obtained her assigned fish quota. (For boundaries of fishing areas see chart on Pg. 32)

The vessel departed Isle aux Morts at about 1630 and proceeded to a fishing ground north of Cape Ray. At 1734, the vessel reported to Port-aux-Basques Vessel Traffic Centre her position as being three miles south-east of Channel Head, and at 1857, reported again in a position off Cape Ray.

On the evening of January 22, 1987, the crew made two tows and loaded about 3630 kg (8,000 lb) of codfish in the hold, then proceeded to Codroy to secure for the night and to unload her fish at the fish plant. However, while alongside the wharf at Codroy, "THE MYERS III" did not unload her catch. On January 23, 1987, all fishing vessels including "THE MYERS III" at Codroy Harbour remained in port due to stormy weather conditions which persisted all day.

On the morning of January 24, 1987, between the hours of 0500 and 0700, about 10 fishing vessels, including "THE MYERS III", departed Codroy for the cod fishing ground located west of Codroy Island (fishing area 4R).

"THE MYERS III" had five persons on board, four of whom were brothers. Joseph Myers, Jr., was the skipper and held a Fishing Master Class 4 Certificate; two of his brothers also held Fishing Master Certificates. "THE MYERS III" had two diesel fuel tanks in the engine-room, each with a capacity of

2273 L (500 gal). Prior to commencing fishing, the fuel tanks were filled.

Some six miles west of Codroy "THE MYERS III" was sighted dragging her trawl by a number of fishing vessels. At about 1100, "THE MYERS III" called the fishing vessel "RICH POINT" on the VHF R/T and reported a catch of about 4540 kg (10,000 lb) from her first set; she called again at about 1345 reporting another catch of about 4540 kg (10,000 lb) from the second set and indicated that they were going to shoot their trawl again to the north. The "RICH POINT" was dragging south and the two vessels were about a mile apart. Just prior to that time, at 1330, the fishing vessel "ODERIN" spoke with "THE MYERS III" on the VHF R/T and was informed of her catch from the two tows, as previously mentioned. Each tow lasted for about one and one-half hours. Radio communication was carried out on the VHF R/T, channel 9.

Although the forecast was for gales in the afternoon, up to this time the weather, as reported by fishermen in the area, was generally good; light northerly wind, light snow, poor visibility and calm sea.

The "RICH POINT" returned to Codroy at 1630 and no further communications were carried out between "THE MYERS III" and the "RICH POINT".

At 1600, the "MICHAEL J II" had also seen "THE MYERS III" hauling in her catch. Fishing was good in the area. At 1630, the "ODERIN" was towing her gear in close proximity to "THE MYERS III" when the wind started to freshen from a south-westerly direction at 15-20 knots. The barometer reading dropped from 30.3 to 29 inches in a short time indicating that bad weather was approaching the area. The crew of the "ODERIN" completed hauling their trawl at 1730, at which time the south-westerly wind had increased to 50-60 knots and the sea had become rough. Prior to leaving the fishing ground, the "ODERIN" made several unsuccessful attempts to contact "THE MYERS III" using the VHF R/T. A number of other fishing vessels also tried but were unable to establish radio communication with "THE MYERS III".

The vessel was last seen on the radar of the "ODERIN" at 1740 at a distance of 1-1½ miles due west. The last reported position of "THE MYERS III" was six miles west of Codroy.

At that time there were eight fishing vessels returning to Codroy to seek shelter. All of them arrived safely in port by 1900.

At about 1918, the Port-aux-Basques received an inquiry from the fishing vessel "NORTHERN CHALLENGER" about "THE MYERS III" and at 1924, the Codroy fish plant manager reported to the VTS that "THE MYERS III" was overdue. St. John's Marine Rescue Sub-Centre, RCC Halifax and the local RCMP were notified by the VTS and a general marine broadcast was initiated by RCC Halifax and transmitted by Stephenville Coast Guard Radio Station and VTS Port-aux-Basques. A Buffalo aircraft, CCGS "JACKMAN" and several other commercial vessels were tasked to the scene. Gale force wind from the south-west was reported at this time with limited visibility in blowing snow which extensively hampered the search effort.

It is considered possible that when the skipper of "THE MYERS III" talked to the "ODERIN" at 1345, there were already 12,700 kg (28,000 lb) of fish on board and probably two more tows of 4,540 kg (10,000 lb) each were taken bringing her load to possibly 21,770 kg (48,000 lb).

At 2100, the skipper of the "CAPE ROBERT" claimed he momentarily sighted the mast lights of "THE MYERS III" in a position approximately 1½ miles south of Codroy Island. He also sighted the "BARRY & TRINA" at a distance of about one-half mile from the Island while aboard his vessel which was alongside the wharf at Codroy.

The search for "THE MYERS III" and her missing crew continued up until January 29 in co-operation with the RCMP and Search & Rescue. One body was recovered on January 26, and a second body was recovered on January 27 in the area of Caplin Cove, south of Codroy Harbour. The RCMP took over the case as 'the missing persons case' from Search & Rescue on January 29, 1987. Shoreline searches were maintained by the RCMP members and volunteers for several days. On May 17, four independent divers searched the area with negative results. On May 26, the wreck of "THE "MYERS III" was discovered on the bottom in position Lat. 47°51.5' N., Long. 59°23.5' W. lying inverted in some 30 m of water.

Analysis

1. Description of vessel

"THE MYERS III" was a wooden-hulled fishing vessel of closed construction. Her wooden superstructure, accommodation, engine-room and wheel-house were located forward of amidship, together with two fuel oil tanks (port and starboard) in the engine-room. Abaft the engine-room was the fish hold and at the stern was the lazaret which encompassed the steering gear. A gallows

SKETCH OF DECK ARRANGEMENT
OF "THE MYERS III"

CROQUIS DE LA DISPOSITION
DU PONT DU "THE MYERS III"

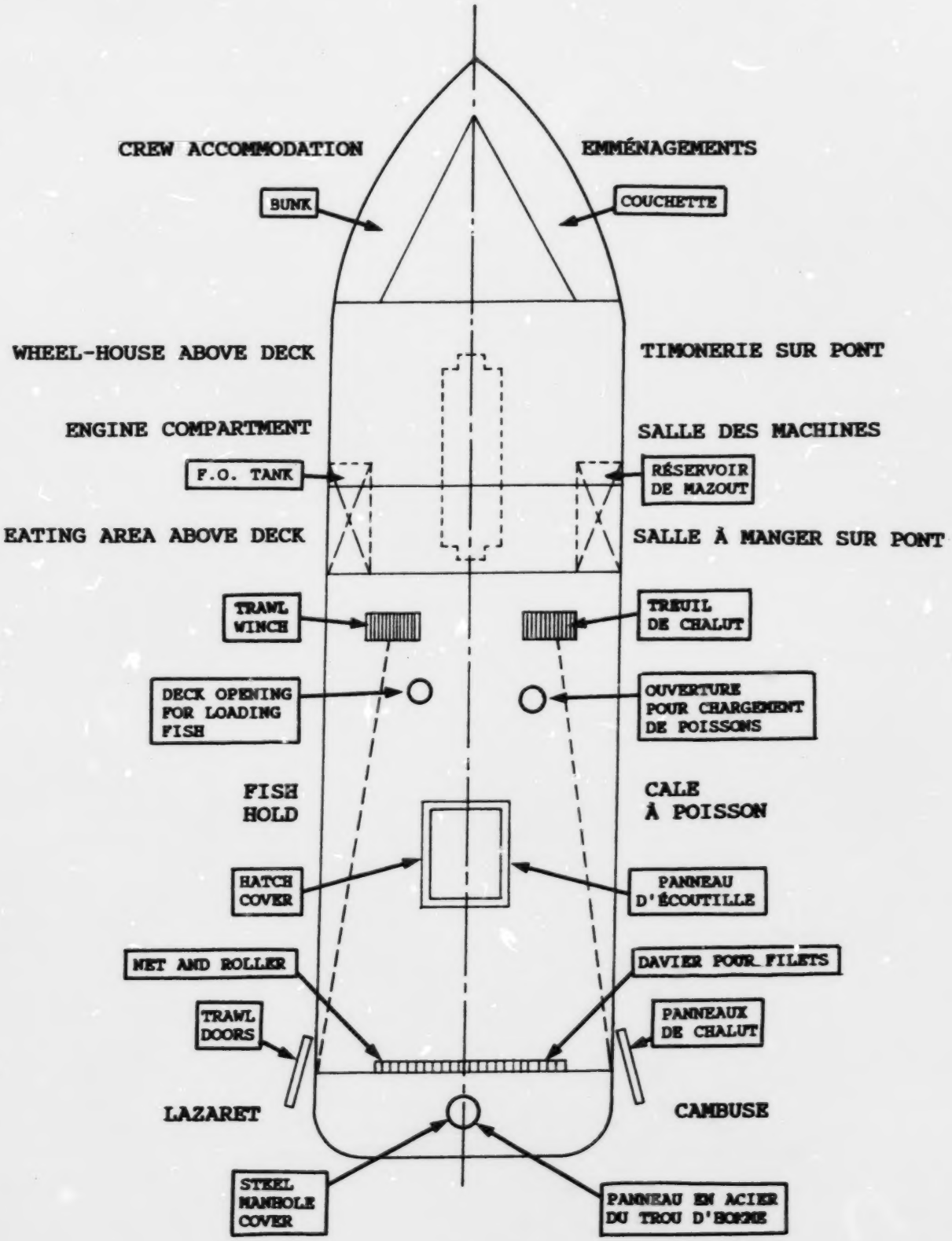


FIG. 1

was rigged on the stern with two trawl doors hanging on each side and the net stowed underneath the gallows on deck.

There were three wooden bulkheads separating the crew accommodation, the engine-room, the fish hold and the lazaret. There were 2 winches, forward of the 1.2 m by 1.2 m hatch opening. Between the hatch coaming and the winches there were two fish loading scuttles on deck, each about 38 cm in diameter, fitted with a plastic drum open from both sides and a plastic cover with a lock ring. The plastic drums extended 0.3 m above the main deck and their openings were used for loading the codfish after bleeding it. The 1.2 m by 1.2 m hatch opening was covered with wooden boards followed by tarpaulin and secured with wooden wedges. The crew usually only opened the fish hold cover for unloading the fish while at the fish plant and were not in the practice of opening it at sea for loading fish; however, depending on sea conditions, it is possible that with such a large load, the hatch cover may have been opened to accelerate the process of loading their catch inside the fish hold. The wooden bulwark had a height of about 1 m and scuppers were located on deck between frames to drain water overboard.

(For deck arrangement see Fig. 1)

2. Inspection and class

There was no stability information available with respect to "THE MYERS III" nor was such information required by the Small Fishing Vessel Inspection Regulations. Only vessels intended to be engaged in herring or capelin fishing are required by section 29 of these regulations to have inclining experiments carried out to determine their stability. Thus, in the absence of stability information, it is not possible to calculate her condition with any accuracy at the time of her loss.

As a small fishing vessel of more than 15 tons, gross tonnage, the "THE MYERS III" was subject to quadrennial inspection by the Ship Safety Branch of the Canadian Coast Guard. The vessel was in possession of a Steamship Inspection Certificate SIC 29, issued on April 19, 1983, to expire on March 1, 1987; she was classed as Home Trade Class III, on the Coast of Newfoundland and Labrador with the following restrictions:

Not more than 20 miles off shore and the maximum distance between suitable ports of refuge on the route does not at any time exceed 100 miles.

3. **Life-saving equipment**

The items recovered by the RCMP Port-aux-Basques Detachment and later identified as having come from "THE MYERS III" were as follows:

1. Two wooden oars
2. Schermuly Pinpoint, one hand distress flare, Lot No.7400, manufactured June 1982, made in England
3. One winter sneaker, left foot, size 9
4. Mustang **Floater Jacket**
5. Beacon Industries, **PFD** Style B810 - Canoe Vest, D.O.T., approved No.23-18-28, Lot No.4043CD
6. Mustang sport wear, **PFD** Style 2020 Industrial Vest, D.O.T. approved No.18-14, manufactured August 1975, size large
7. Mustang Floater, **Industrial Vest** 2020, Lot No.5071BG, Type 1, D.O.T. No.29-18-GA, size **Large-Ex.Large**
8. One 4.88 m aluminum boat.

Also, the hand-held distress flares found were manufactured in June 1982 and, as they were more than 4 years old from the date of manufacture, they are construed by section 8 Schedule III of the Life Saving Equipment Regulations, not to meet the requirements of these regulations. (For excerpts of regulation see Annex I.)

At the time of issuance of the SIC 29 on April 19, 1983, the vessel was found to be in compliance with the life-saving equipment provisions of the Small Fishing Vessel Inspection Regulations but evidence obtained at the time of casualty would indicate that the vessel no longer complied with the aforementioned regulations thus rendering the SIC 29 invalid. This evidence included the following:

(a) the vessel's complement at the time of casualty comprised 5 persons instead of 4 as certified in the SIC 29; (reportedly, the extra person was carried for the first time for training purposes);

(b) five PFDs were found instead of the required standard lifejackets; and

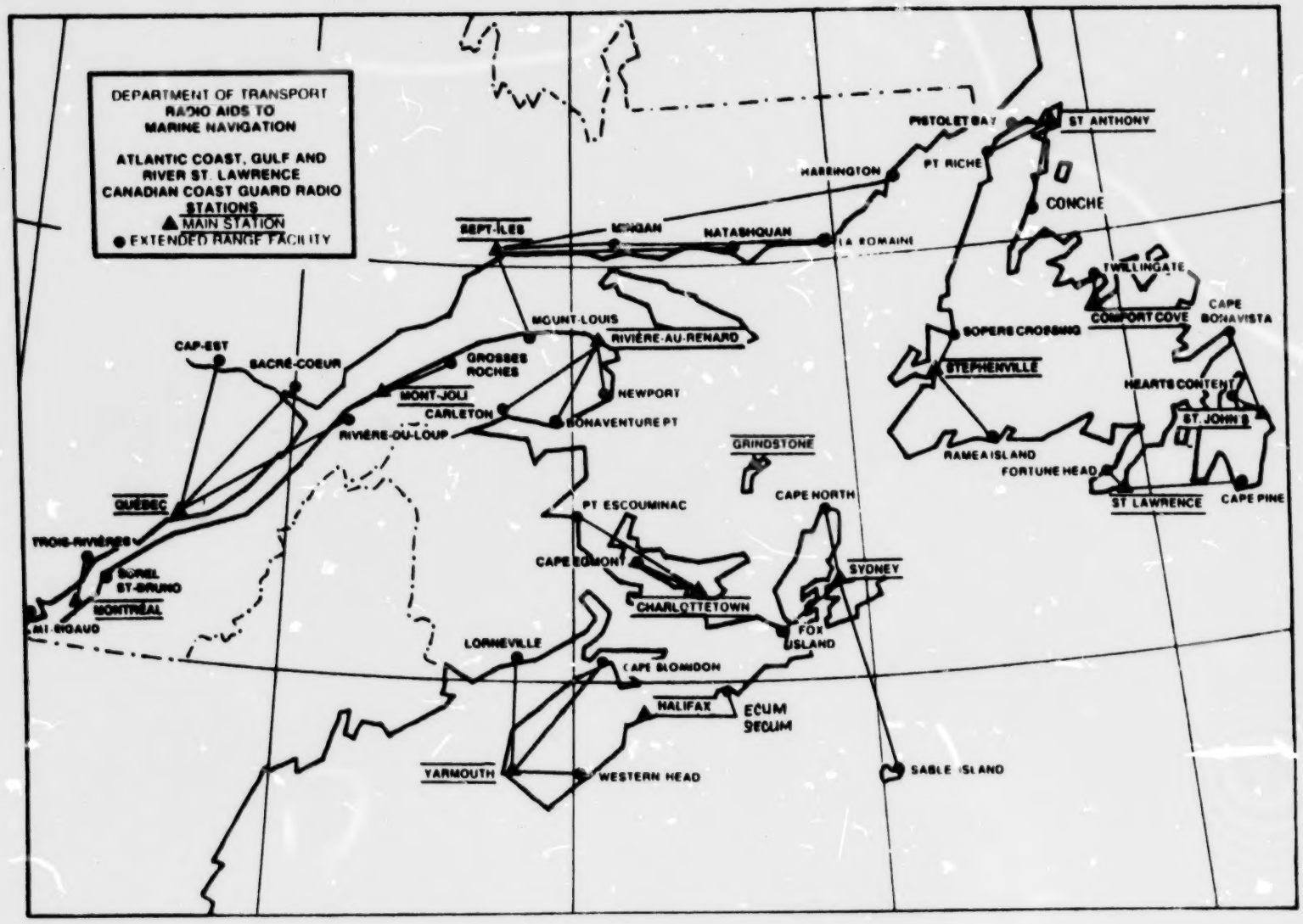
(c) the last recorded inspection of the 4-person, Dunlop Seafarer inflatable liferaft was on April 27, 1984 and there is no record with the authorized Dunlop Service Depots in Halifax and Newfoundland to indicate that it had been subsequently inspected/serviced, thus indicating that the liferaft was not serviced annually in accordance with section 3, Schedule XI, 'LIFE RAFTS', of the Life Saving Equipment Regulations. (For excerpts see Annex I.)

Compliance with these Regulations is the responsibility of the owner and the skipper.

"THE MYERS III" did not carry survival suits nor an EPIRB on board and none are required by regulations.

4. **Load capacity and renovations**

During the fall and winter of 1985, "THE MYERS III" had extensive renovations made to increase her load capacity which consisted of raising the main deck 0.3 m, a new wheel-house, and the removal of her fuel tanks from the lazaret and installing them inside the engine-room. The length B.P. of the vessel was increased from 13.3 m to 13.8 m, the depth in the hold from tonnage deck to ceiling amidships increased from 1.5 m to 1.8 m and the length of the engine-room increased from 2.7 m to 3.4 m. The fish hold measurement after the renovations was estimated to be: height 1.8 m, length 5.2 m and mean width 3.9 m. The fish hold capacity was 36.5 m^3, which would give a maximum catch of cod, according to accepted stowage factor for the fish, of about 18,150 kg. The vessel was remeasured for her gross tonnage and the renovations were generally accepted by the Ship Safety Branch of the CCG. According to the Department of Fisheries and Oceans, the vessel's previous hold capacity was approximately 28.3 m^3. Fish holds are not measured by a Ship Safety surveyor while calculating the vessel's tonnage measurement.


DEPARTMENT OF TRANSPORT
RADIO AIDS TO
MARINE NAVIGATION
ATLANTIC COAST, GULF AND
RIVER ST. LAWRENCE
CANADIAN COAST GUARD RADIO
STATIONS
▲ MAIN STATION
● EXTENDED RANGE FACILITY
PISTOLET BAY
ST ANTHONY
HARRINGTON
PT RICHE
CONCHE
SEPT-ILES
NATASHQUAN
LA ROMAINE
TWILLINGATE
COMFORT COVE
CAPE BONAVISTA
SOPERS CROSSING
STEPHENVILLE
HEARTS CONTENT
ST. JOHN'S
RAMEA ISLAND
FORTUNE HEAD
ST LAWRENCE
CAPE PINE
MOUNT-LOUIS
RIVIÈRE-AU-RENARD
CAP-EST
SACRÉ-COEUR
GROSSES ROCHES
MONT-JOLI
NEWPORT
CARLETON
BONAVENTURE PT
RIVIÈRE-DU-LOUP
GRINDSTONE
CAPE NORTH
PT ESCOUMINAC
QUÉBEC
TROIS-RIVIÈRES
SOREL
ST-BRUNO
MONTRÉAL
CAPE EDMONT
SYDNEY
CHARLOTTETOWN
FOX ISLAND
LORNEVILLE
CAPE BLOMIDON
HALIFAX
ECUM SECUM
YARMOUTH
WESTERN HEAD
SABLE ISLAND

The following figures obtained from the local fishery company indicates the last recorded cod catches of "THE MYERS III" at the Codroy fish plant in 1986:

April 24, 1986 -	40,116 lb	18,196.6 kg
April 22, 1986 -	24,944 lb	11,314.6 kg
April 15, 1986 -	5,364 lb	2,433.1 kg
April 14, 1986 -	1,697 lb	769.8 kg

Under a full load of over 18,150 kg of fish inside the fish hold, "THE MYERS III" would have had very little freeboard. It was estimated to be about 12 cm at the stern and 30 cm amidships.

During rough seas it is normal for heavily laden fishing vessels of this size to find their decks awash especially in following seas, which may result in some downflooding. This downflooding, if allowed to continue, would result in a reduction of the vessel's transverse stability and thereby retarding her ability to react to the effects of the wind and sea conditions.

5. Radio and communications

"THE MYERS III" had one VHF R/T in operation and a single side band radio, which was in need of repairs. The crew of "THE MYERS III" occasionally encountered some problems with the VHF radio, due to a loose wire at the back of the set. This may account for the reason of the loss of radio communications between "THE MYERS III" and other fishing vessels in the area prior to the storm. No distress call was received from her during the storm by any ship or shore station including the fishplant at Codroy which is equipped with a VHF R/T and monitors channel 6. A good VHF coverage for the area is provided by a number of CGRS and VTS stations all of which monitor channel 16, the International Distress, Safety, Calling frequency, on a 24-hour basis; these stations are:

(a) Stephenville CGRS, with extended range facility at Sopers Crossing,

(b) Port-aux-Basques (VTS station),

(c) Grindstone CGRS, and

(d) Sydney with extended range facility at Cape North.

(For locations of these stations see Figure 2)

Further, the MF R/T distress frequency of 2182 kHz is also monitored continuously by all CGRS and most vessels. However, should the distressed vessel not receive any response on these distress frequencies, she can then use any other available frequency on which attention might be attracted to transmit the distress message.

While the vessel was enroute from Isle aux Morts to Codroy on January 22, she reported her position to Port-aux-Basques VTS on the VHF R/T, channel 14.

6. Weather conditions and icing of the vessel

The weather forecast issued at 1730, January 23, downgraded the storm warnings to gale warnings. Nonetheless all weather forecasts did continue to issue gale warnings and freezing spray warnings. Despite this, "THE MYERS III" continued to fish and at the time of casualty was known to have had about 21,770 kg of fish. This load in the weather encountered is considered to be excessive and detrimental to the safety of the vessel.

Chapter 3 of this publication covers in detail the weather forecast, the actual recorded weather and the conditions conducive to the icing of the vessel.

7. Effect of icing and seaworthiness

The same day, another fishing vessel the "BARRY & TRINA" ran aground while attempting to seek shelter at Codroy. The following day heavy icing was evident on the hull and superstructures of the "BARRY & TRINA". As both vessels encountered similar weather conditions, some icing had to have formed on the hull/superstructure of "THE MYERS III".

The effect of icing on the seaworthiness of a vessel is contained in the Canadian Coast Guard publication entitled An Introduction to Fishing Vessel Stability TP8161 and states in part.

Seaworthiness

Ice formation adversely affects the seaworthiness of the vessel in the following ways:

1. It increases the weight of the

vessel, increasing draft and reducing freeboard and reserve buoyancy.

2. It raises the centre of gravity of the vessel (G) causing a reduction in G.M. i.e. reducing stability.

3. It changes the trim.

4. If the distribution of ice is uneven, it causes a list.

5. It reduces speed.

6. It reduces manoeuvrability.

8. Autopsy report

An autopsy was performed on Ewan Donald Hynes and Clarence Myers at Western Memorial Hospital in Corner Brook, Nfld. The cause of death was determined to be asphyxia/hypothermia due to accidental drowning type II. Blood and urine samples from Ewan Donald Hynes were negative.

The bodies of the two victims when recovered had no lifejackets and they were wearing light clothing for the weather conditions encountered, which would indicate there was little or no time for an orderly abandonment.

9. Qualifications and experience

The vessel was owned by the Myers family and operated by them.

Joseph Myers, Jr. was nominally the skipper of the vessel. He held a Fishing Master Class IV Certificate issued on April 14, 1983, and had a valid MED I certificate issued in 1983. His total sea time was about four years on board small fishing vessels.

David Myers, owner and operations manager, held a Fishing Master Class III Certificate issued on April 25, 1984, and had a valid MED I certificate issued in 1983. His total sea time was about 7 years on board small fishing vessels.

James Myers held a Fishing Master Class IV Certificate issued on February 21, 1983, and had a valid MED I certificate issued in 1983. His total sea time was about

7½ years on board small fishing vessels fishing with his brothers.

Clarence Myers did not hold a marine certificate nor was he required to by regulations. He had been fishing with his brothers for several years.

Ewan Donald Hynes. This was first time on board "THE MYERS III" to acquire knowledge of the cod fishery. He had some fishing experience on board other smaller fishing vessels.

The crew of "THE MYERS III" was not considered well experienced in the area off Codroy, having previously fished in the Strait of Belle Isle. They fished off Codroy in April 1986, for a period of one week, during fine weather and this was their second fishing trip in that area.

Findings

In the absence of any witnesses, the precise cause of the disappearance of the small wooden dragger "THE MYERS III" during stormy weather conditions off Codroy, with the loss of all hands, is not possible to determine; but it would appear that she was suddenly overwhelmed. The following factors may be considered to have contributed to the loss of "THE MYERS III" and her crew:

- the decision was made too late to seek shelter;
- the gale forecasted turned into storm force winds and the onset was sudden;
- the vessel was overloaded not only for the storm experienced but also for the gale that was forecast;
- the vessel's seakeeping qualities in the heavily loaded condition were further deteroriated by icing and the considerable water shipped on deck; and
- the vessel disappeared in poor visibility and no distress was possible.

Other Findings

Without adequate life-saving equipment, the carriage of 5 crew members instead of 4 as certified in the SIC29 rendered the certificate invalid.

The liferaft had not been serviced annually as required by Schedule XI of the Life Saving Equipment Regulations.

The distress flares should have been replaced after four years as required by Schedule III of the Life Saving Equipment Regulations.

The vessel did not carry an EPIRB nor was one required to by regulations. However, had she carried one, it may have alerted the authorities to the distress situation sooner and initiated the SAR operations earlier.

The vessel did not carry any immersion suits nor was she required to by regulations. However, had she carried them, they may have helped in saving lives.

2. GROUNDING OF THE "BARRY & TRINA" OFF CODROY, WEST COAST OF NFLD., JANUARY 24, 1987

Particulars of Vessel

Name	"BARRY & TRINA"
Official Number	803743
Port of Registry	St. John's, Nfld.
Gross Tonnage	37.52
Net Tonnage	17.3
Length	18.1 m
Breadth	4.88 m
Depth	3.38 m
Draught (at time of incident)	F: 2.1 m A: 3.0 m
Type	Steel Dragger
Built	1978, Montauk, NY, USA
Propulsion	G.M. V12-71 diesel engine 340, b.h.p., driving a single fixed-pitch propeller
Cargo	nil
Complement	6
Owner	Kevin Bennett Trepassey Nfld.

Navigating Equipment

Radar (1)	Raytheon 2600 (16 miles)
Radar (2)	Furuno 1700 (16 miles)(new)
Echo Sounder (1)	Si-Tex HE31A Mark 1
Echo Sounder (2)	Koden CVS88 (new)

Loran C (1)	North Star 7000 (new)
Loran C (2)	Morrow Eagle LCS 4000
VHF Radio (1)	Texas Instrument TI2000
VHF Radio (2)	SMR ST550 (new)
SSB Radio	Motorola Micom S (new)
Plotter Video	Furuno GD170 (new)
Autopilot	Robertson AP40 (new)
Magnetic	Compass

Background

On the afternoon of January 24, 1987, the "BARRY & TRINA", with six crew members on board, departed Codroy for the cod fishing ground located off Codroy Island, south-west coast of Newfoundland. The vessel was forced to suspend fishing due to rapidly deteriorating weather conditions which caused the failure of her electronic equipment.

As she was making her approach to Codroy, she ran aground some 600 m south of Codroy Harbour entrance. All her crew were rescued safely and the vessel was considered a constructive total loss.

Narrative

The steel dragger "BARRY & TRINA" arrived at Codroy on the morning of January 22, 1987, to join in the cod fishery in area 4R. On January 23, 1987, all fishing vessels at Codroy Harbour remained in port due to stormy weather conditions which persisted for the whole day.

The "BARRY & TRINA" departed Codroy on January 24, 1987, at approximately 1600 after unloading her fish and taking on some diesel fuel and hydraulic fluid. The vessel steamed for over an hour until she reached a depth of 140 fathoms and shot her gear in a position 7½ miles WNW of Codroy. The sea was calm with a light breeze. At 1720 the wind freshened and the skipper decided to haul in the nets. Some 30 minutes later, when they were half-way through hauling the trawl, the wind was so strong that the radar dome was blown off and all the electronic equipment lost power for a short period. The Furuno radar from which the dome was lost became inoperative.

The second radar, a Raytheon was then switched on but was also found to be inoperative. The video plotter and the Loran C were only operating intermittently and the information received from both was considered unreliable. The echo sounder was still operating but the readings were erratic.

As the VHF was still working, the skipper called the fishing vessel "SEA SONS II" to inform them of what had happened and to request their assistance. By 1815 the "BARRY & TRINA" had completed hauling her gear and started heading for Codroy. They had no fish on board as the nets had been in the water for only a short time. The two vessels maintained radio contact the entire time and the "BARRY & TRINA" advised the "SEA SONS II" of her position by using the intermittent information received from her Loran C. The skipper of the "SEA SONS II" was plotting the Loran C position of the "BARRY & TRINA" on his video plotter and gave them various courses to direct them to the entrance of Codroy where the skipper of the "BARRY & TRINA" was able to sight Codroy Island light, sporadically, due to the snow, high wind and heavy seas.

As the "BARRY & TRINA" drew close to Codroy, the skipper of the "SEA SONS II" could not give any further courses but asked the skipper of the "BARRY & TRINA" to use his searchlight to guide his vessel into the harbour. Several other fishing vessels were also trying to assist in giving directions over the VHF R/T.

Meanwhile, on board the "BARRY & TRINA", one deck-hand went forward, two were on the afterdeck, while the other deck-hand remained in the wheel-house. The crew sighted the land with the aid of the searchlight. The vessel was approaching the land on an easterly heading and the skipper then made a course alteration to the south-east, after being advised to do so by someone on the radio.

Shortly afterwards, they sighted a flashing light, which was held by a fisherman on the wharf, to guide them in between the spar buoys. While the skipper proceeded to alter the course of the vessel to a northerly direction towards the light, the "BARRY & TRINA" ran aground some 600 m in a south-easterly direction from the entrance to Codroy Harbour in position Latitude 47°52.6'N., Longitude 59°23.4'W. The grounding occurred at midnight while the vessel was steaming at a slow speed of 2 knots.

Several fishermen, whose vessels were tied up at Codroy, ran along the shoreline to the stricken vessel with six immersion suits from the fishing vessel "SEA SONS II" and the

"CAPE ROBERT" and were successful in rescuing all crew members from the "BARRY & TRINA".

There were approximately 13,640 L (3,000 gal) of diesel fuel on board which leaked into the water for several days following the grounding.

The vessel was salvaged at a later date, towed to Codroy Harbour, subsequently declared a constructive total loss and offered for sale by tender.

Analysis

1. Description of vessel

The vessel was built at Greensport, New York, U.S.A. as a steel dragger with a wooden wheel-house located forward. Her hull is transversely divided into four compartments by three watertight bulkheads. The forward compartment is comprised of the engine-room space with the crew accommodation above. The centre compartment encompasses the fish hold; and the after compartments consist of a large fuel tank, capacity 4,910 L (1,080 gal), then the lazaret.

The forward compartment had a diesel fuel tank forward, capacity 2270 L ; two (port and starboard) fuel tanks, capacity 3410 L each; a hydraulic fuel tank, capacity 1135 L; and two fresh water tanks, with a capacity of 1135 L and 2270 L respectively. The vessel's fuel tanks were almost full at the time of grounding.

The "BARRY & TRINA" was equipped with the most recent navigational equipment installed by an electronic company in St. John's, Nfld. in October 1986.

2. Inspection and class

The "BARRY & TRINA" was subject to quadrennial inspection by Ship Safety Branch of the Canadian Coast Guard. The vessel was inspected at Fermeuse, Nfld., on October 9, 1986, and was issued a Steamship Inspection Certificate SIC 29 on that date to expire on August 28, 1987. The reason for the short term was to inspect her shaft bearing; however this fact was not related to her loss. The vessel was classed as Home Trade I on the Coast of Newfoundland and Labrador.

3. Harbour and approaches

Codroy Harbour is situated on the east side of Codroy Island and provides sheltered anchorage for fishing boats. There is a breakwater extending 61 m from the east side of the harbour, at Beach Point, to protect a U-shaped public wharf. A red flashing light is located at the outer end of the breakwater. The south end of Codroy Island has a red flashing light shown from a 2.1 m circular tower. The Codroy Fairway light buoy, XY, LL No.173.5, positioned nearly 0.5 mile ESE of Codroy light, and the Codroy light buoy XY2, LL No.174.3 shown on the Canadian Chart No.4682, are usually maintained from May to December. The Codroy light buoy XY2 was replaced by winter spar buoy on December 19, 1986. The Fairway buoy LL No.173.5 was removed on December 19, 1986, per regular removal routine, because of winter ice conditions, and was to be placed back in the advertised position at the commencement of the new season. The flashing lights at the breakwater and the south end of Codroy Island were lit on January 24, 1987. These lights are maintained 12 months of the year.

4. Navigational equipment unreliable

The radar dome which was blown off encompassed the scanner unit of the new Furuno 1700 daylight viewing radar. The unit was mounted on a 1.5 m steel stand on top of the wheel-house. The base of the scanner was connected to a steel plate on the stand by 4 stainless steel 13 mm bolts.

It has not been determined why the dome was blown off as it was not feasible to reach the vessel in her grounded position. The manufacturer's specification for Furuno model 1700 radar set stipulates that the antenna unit is capable of withstanding relative wind force of up to 100 knots. The weight of the antenna unit is 11 kg.

The electronic equipment and navigation lights were connected to a 32-volt main power supply system through a 16-breaker electrical panel. Five of those breakers were used for the electronic navigation equipment and the rest for general purposes.

The loss of radar antenna created a short-circuit and the resultant loss of all electrical power for a brief period of time would indicate that the vessel's main electrical power supply was interrupted. This probably resulted in the over drainage of electrical power from the 32 V battery supply. The existence of the

low/inadequate power supply is substantiated by the intermittent operations of the Loran C and the erratic operation of the echo sounder.

5. **Weather conditions**

Chapter 3 of this publication deals extensively with the weather forecasts and the actual weather recorded at Mouse Island weather station, Port-aux-Basques located some 22 miles SE of the Codroy Island. At the time of casualty the weather experienced by the "BARRY & TRINA" was SW'ly winds with gusts of up to 55-60 knots.

6. **Tidal stream**

The Newfoundland Sailing Directions state the following tidal streams for the area of Codroy:

> The flood tidal stream is usually North-going and the ebb stream South-going; frequently there are heavy tide rips between Cape Anguille and Codroy Island. During stormy weather, there is a heavy confused sea in this area.

7. **Life-saving equipment**

"BARRY & TRINA" was certified to carry a crew of five; however, there were six persons on board at the time of grounding. It was reported that the vessel was carrying the required life-saving equipment for the six crew members as required by the Small Fishing Vessel Inspection Regulations, as follows:

- 7 approved standard lifejackets,
- 1 aluminum boat, capacity 6 persons,
- 1 RFD 'A' pack, inflatable liferaft capable of accommodating six persons, serviced in October 1986,
- 2 approved lifebuoys, and
- 18 distress flares A and C type.

8. **Pollution**

The "BARRY & TRINA" had no catch or ice aboard at the time of grounding. She had 14,000 L of diesel fuel and approximately 1,130 L of hydraulic fluid on board which

leaked into the sea and caused some pollution for several days.

9. **Qualifications and experience**

The skipper of the "BARRY & TRINA" holds a Canadian Fishing Master Class IV Certificate, issued in February 1985. He has 10 years experience as mate on board 45-foot longliners and five years on board small inshore boats. It was the skipper's first year fishing off Codroy. He has no local experience of the harbour or the type of weather expected in that area during winter months.

The mate of the "BARRY & TRINA" holds a Fishing Master Class IV Certificate issued on March 12, 1982. He has about 24 years experience on board offshore and inshore draggers. He was not familiar with Codroy Harbour.

Findings

Whilst returning from the fishing grounds under storm conditions, the fishing vessel "BARRY & TRINA" ran aground about 600 m south-east of the entrance to Codroy Harbour on January 24, 1987. The vessel was salvaged but subsequently declared a constructive total loss.

It would appear that the following factors contributed to the grounding:

- the decision to seek shelter was too late as the winds suddenly increased to storm force;
- the visibility was poor in blowing snow;
- storm force winds carried away the radome antenna of the radar-in-use;
- the loss of the first radar caused electrical problems resulting in erratic operation of other navigational equipment and rendered the second radar inoperative;
- the loss of both radars, the erratic operation of other navigating equipment and confusing navigation instructions received by VHF R/T from other fishing vessels resulted in the skipper becoming disoriented; and

- the storm force south-westerly winds, the heavy confused sea and shallow water in Codroy Road made it difficult for the skipper to control his vessel.

"BARRY & TRINA"

NOTE: Ice accretion on superstructure

NOTA: Accumulation de glace sur la superstructure

Approximate grounding position of the "BARRY & TRINA"

Lieu approximatif de l'échouement du "BARRY & TRINA"

CHAPTER 3

General Analysis

1. Cod fishery

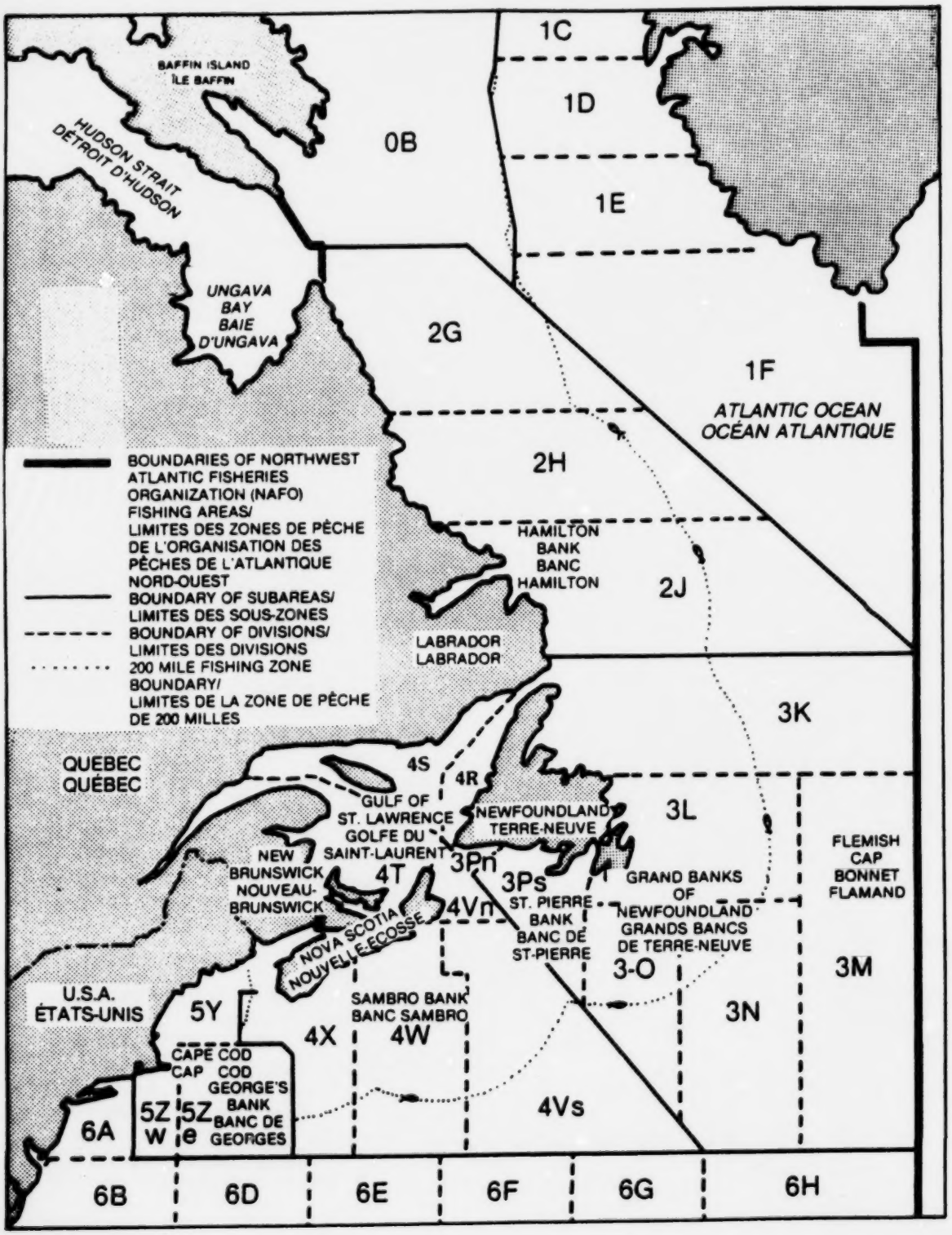
The offshore ground-fish fleet comprises all ground-fish vessels over 30.5 m in length, while vessels similar to "THE MYERS III" and the "BARRY & TRINA" which are less than 30.5 m long fall in the inshore fleet category. The quotas assigned to the inshore and offshore fleets are contained in the Atlantic Ground-fish Management Plan and is specified as proportions of the Canadian share of 'total allowable catch' (TAC) of each ground-fish stock. (For excerpts see Annex II)

Under the Fisheries Act, TAC's are set annually for all major 'regulated' ground-fish stocks within the Canadian 200-mile zone upon the scientific advice provided by the Canadian Atlantic Fisheries Scientific Advisory Committee; except for some 8 key ground-fish stocks, for which scientific advice is provided by the Scientific Council of the Northwest Atlantic Fisheries Organization 'NAFO'. The 'NAFO' is an international organization comprised of 18 member nations which is the governing body for the management of the fishery resources in the Northwest Atlantic outside of exlusive 200-mile zones.

Since "THE MYERS III" home port was Bartletts Harbour, Nfld., she came under the enterprise allocation management of the Gulf Region, Fisheries & Oceans, which is the total level of allocations of ground-fish assigned to an individual enterprise for a particular stock(s) expressed in volume (and percentage) terms. The vessel had cod quota in area 4R, and 3Pn of 215,000 kg (475,000 lb), fifty percent to be fished between January 15 and mid-April and the remaining 50% between May 1 and the end of December. (For fishing boundary areas see chart on page 32)

The home port of the "BARRY & TRINA" was Trepassey which is located in area 3L and was under the management of the Newfoundland Region of Fisheries & Oceans. She was leased to an individual from Fortune, Nfld., with a licence to fish in areas 3Ps, 3Pn and 4R. The Gulf Region allocated 500 tons of cod fish to be fished competitively in area 4R and 3Pn for the fishing fleet in area 3Ps. While under lease, the "BARRY & TRINA" was eligible to fish in area 4R. Fishing licences are assigned to individuals and not to fishing vessels.

BOUNDARIES OF FISHING AREAS
LIMITES DES ZONES DE PÊCHE



(For Canadian ground-fish inshore/offshore allocations, annual landings Atlantic Coast and annual ground-fish landings by vessel size see Annex II.)

2. **Weather**

Summary of Marine Weather Forecasts

The fishing grounds where "THE MYERS III" and the "BARRY & TRINA" fished, and Codroy, are located in the marine weather forecast area of Cabot Strait.

The following marine weather forecasts were issued by Environment Canada from the Maritimes Weather Centre:

(a) 1730 AST Friday, January 23, 1987, valid for tonight and Saturday with an outlook for Sunday:

Banquereau - Cabot Strait -

Storm warning downgraded to gale warning. Freezing spray warning continued. South-east 30 to gales 45 knots diminishing to southerly winds 15 to 25 this evening then increasing again Saturday morning to westerly 25 to gales 40. Rain ending this evening. Flurries Saturday, visibility near one in precipitation. Freezing spray Saturday. Temperatures lowering to minus 8 to minus 4 Saturday. Outlook for Sunday...moderate to strong westerlies.

(b) 0600 AST Saturday, January 24, 1987, valid for today and Sunday with an outlook for Monday:

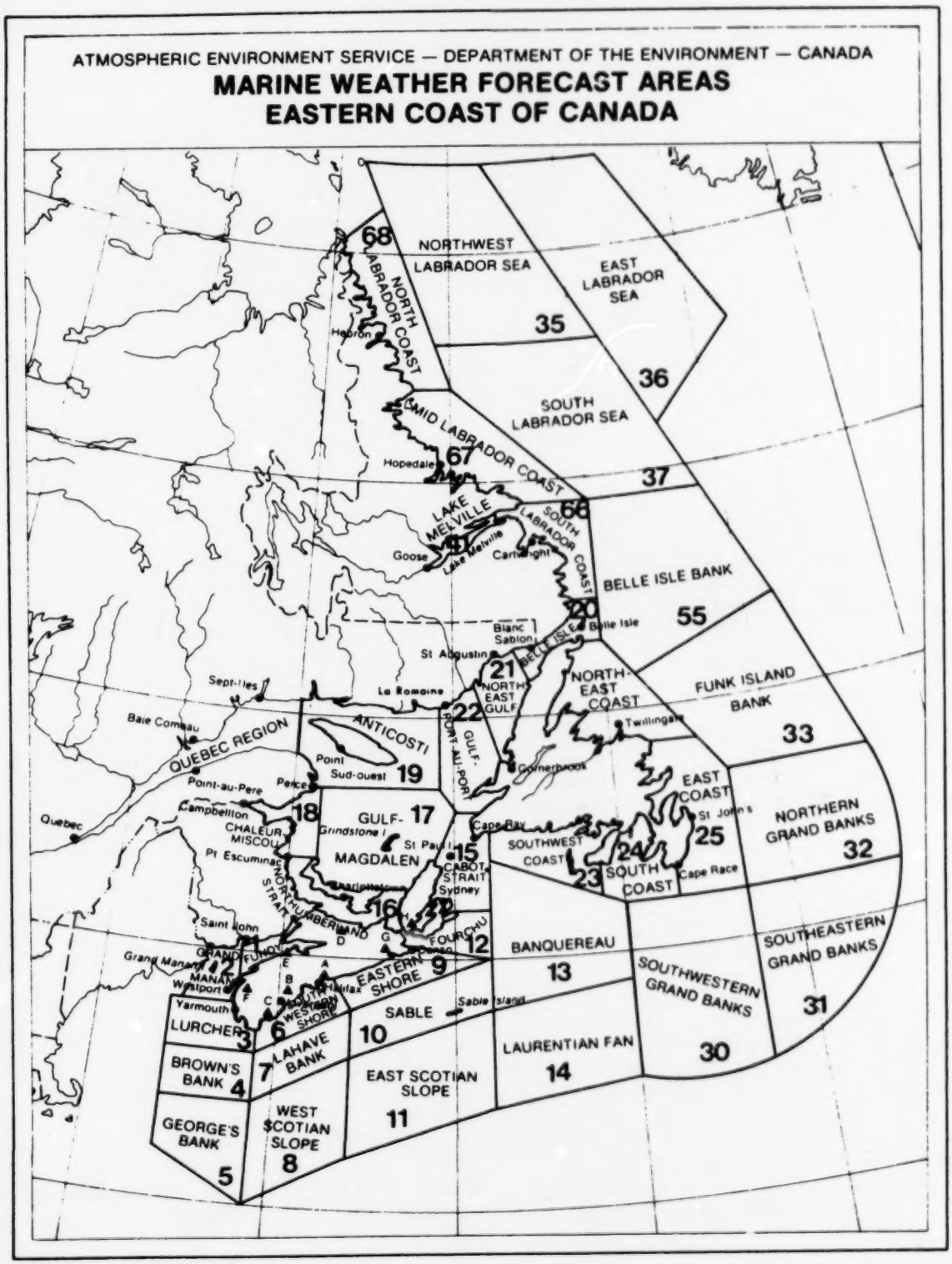
Banquereau - Cabot Strait -

Gale and freezing spray warnings continued. Winds southwesterly 10 to 15 knots increasing to southwesterly 15 to 25 this morning and to westerly 30 to gales 40 this afternoon. Winds diminishing to westerly 20 to 30 Sunday morning. Cloudy. Flurries today and Sunday. Visibility near one in flurries. Freezing spray beginning this afternoon and persisting Sunday. Temperatures lowering to near minus 6 today and near minus 12 Sunday. Outlook for Monday...light to moderate northwesterlies.

(c) 1130 AST Saturday, January 24, 1987, valid for today and Sunday with an outlook for Monday:

NOTE: The area in which the casualty occurred is No. 15.

NOTA: La zone où a lieu le sinistre est au N° 15.



Banquereau - Cabot Strait -

Gale and freezing spray warnings continued. Southwesterly winds 15 to 25 knots increasing to westerly 30 to gales 40 late this afternoon or evening and diminishing to westerly 20 to 30 Sunday morning. Cloudy with flurries today and Sunday. Visibility near one in flurries. Freezing spray beginning late this afternoon or evening persisting Sunday. Temperatures lowering to near minus 6 today and near minus 12 Sunday. Outlook for Monday...light to moderate northwesterlies.

(d) 1650 AST Saturday, January 24, 1987. A storm warning was issued.

Banquereau - Cabot Strait -

A vigorous cold front is crossing the easternmost marine areas. Winds increase rapidly to gale force northeasterly behind the front. Furthermore, there is likelihood of storm force squalls for up to several hours following the frontal passage.

(e) 1730 AST Saturday, January 24, 1987, valid for tonight and Sunday with an outlook for Monday:

Banquereau - Cabot Strait -

Gale warning upgraded to storm warning. Freezing spray warning continued. Westerly gales 45 to 60 knots diminishing to westerly winds 30 to gales 40 this evening. Winds diminishing to westerly 20 to 30 Sunday morning and to westerly 15 Sunday evening. Flurries reducing visibility to one-half to 2. Freezing spray beginning this evening and ending Sunday afternoon. Temperatures lowering to minus 8 to minus 5 tonight. Outlook for Monday...northeast gales developing.

The storm warning issued by the Maritimes Weather Centre was received at Stephenville CGRS at 1724 NST (2054Z) and was on the air as general broadcast at 1745 NST (2115Z) on the VHF channel 16 and the Single Side Band frequency of 2182 kHz. This was followed by continuous marine weather broadcast at 1754 NST (2124Z) on the VHF channel 21B (161.65) and channel 83B (161.775).

Marine Synopsis for the Maritimes issued by Environment Canada from the Maritimes Weather Centre at 1130 AST Saturday, January 24, 1987:

> A north to south cold front over eastern Nova Scotia late this morning will reach Cabot Strait tonight and eastern Newfoundland Sunday. Light to moderate southwesterlies ahead of the front will increase to gale force westerlies in the cold air behind it. Winds will gradually diminish on Sunday as the dominant low over northern Quebec moves into the Labrador Sea. On Monday an intense low pressure system will move up the Eastern Seaboard of the United States pushing strong to gale force easterlies into the southwestern areas. Marine interests are warned that gales are forecast for all areas. Freezing spray is forecast for all areas except Georges Bank, West Scotian Slope, East Scotian Slope and Laurentian Fan.

Marine Synopsis from the Newfoundland Weather Centre issued at 1530 NST Saturday, January 24, 1987:

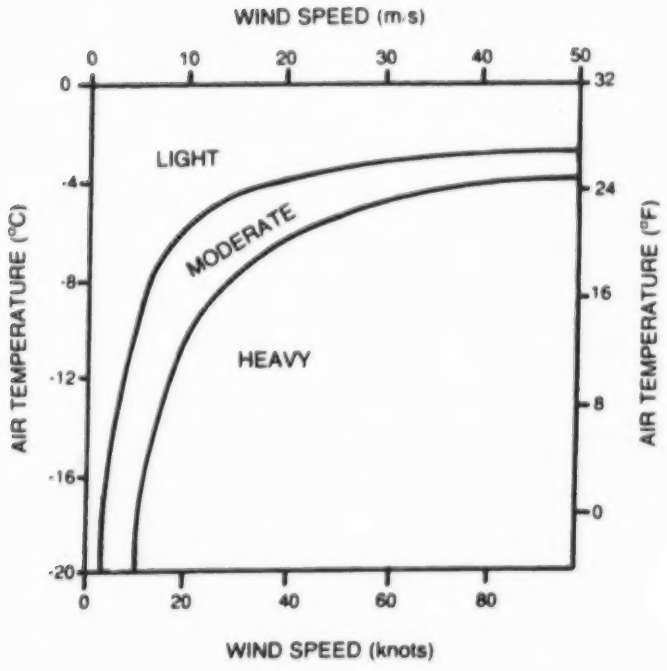
> A low near the Baie Verte Peninsula will continue to move northwards away from the Island tonight. Gales will develop over all waters tonight in the wake of the low. Gales will subside in all areas Sunday. Marine interests are advised that gale warnings are continued for all areas. Freezing spray warnings are in effect for all areas except the Grand Banks.

The Atmospheric Environment Service Station at Mouse Island, Port-aux-Basques, recorded the following hourly reading of the weather on January 24, 1987:

Time	Air Temp.	Pressure	Wind Dir.	Wind Speed
1630 NST	-2°	29.33	230°T	14-31 knots
1730 NST	-5°	29.37	230°T	34-57 knots
1830 NST	-7°	29.48	230°T	35-58 knots
1930 NST	-9°	29.53	220°T	28-54 knots
2030 NST	-9°	29.58	230°T	36-55 knots
2130 NST	-9°	29.61	240°T	25-46 knots
2230 NST	-9°	29.64	240°T	25-45 knots

VESSEL ICING IN ALASKAN WATERS
1979 TO 1989 DATA SHEET

BY
PACIFIC MARINE ENVIRONMENTAL LABORATORY
SEATTLE, WASHINGTON
DECEMBER, 1985



Icing conditions for vessels heading into or abeam of the wind for temperatures of +1°C (34°F)

Light icing – Less than 0.7 cm/hr (0.3 in/hr)
Moderate icing – 0.7 cm/hr (0.3 in/hr) to 2.0 cm/hr (0.8 in/hr)
Heavy icing – Greater than 2.0 cm/hr (0.8 in/hr)

Figure 2 – Nomogram of superstructure icing conditions due to spray for water about 1°C (34°F)

Near gale is considered 28-33 knots
Gale is considered 34-40 knots
Strong gale is considered 41-47 knots
Storm is considered 48-55 knots
Violent storm is considered 56-63 knots

For Cape Ray and the surrounding area during the week of January 20, 1987 the sea surface temperature was -1° to 0°C.

3. Vessel icing

Vessel icing is one of the most serious marine meteorological hazards in high-latitude waters. Icing requires the presence of sub-freezing air temperatures, strong winds, and cool sea temperatures. Wind-driven spray and ship-generated spray which cause water droplets to freeze on the superstructure, are the most common cause of ice formation. Studies have shown that whenever air temperature equals to or is lower than -2.2°C in conjunction with wind speeds equal to or greater than 17 knots, superstructure icing is possible. Generally, winds of Beaufort Force 5 i.e. 17-21 kts may produce slight icing; winds of Force 7 i.e. 28-33 kts, moderate icing; and winds above Force 8 i.e. 34-40 kts, severe icing.

Actual icing potential is a characteristic of each vessel and depends on a number of factors including her design, load condition and sea-keeping ability. Under the above-mentioned conditions, the intensive ice formation/accretion occurs when the vessel in heading into wind and sea. However, in beam and quartering winds, ice accumulates more quickly on the windward side than on the leeward side of the vessel, thus causing the vessel to list, which list, if allowed to continue, can be extremely dangerous.

A study entitled Vessel Icing in Alaskan Waters - 1979-84 Data by the Pacific Marine Environmental Laboratory, Seattle, Washington concluded that vessels under 75 m in length expecting heavy icing conditions must take immediate evasive action either by running downwind or seeking shelter in port.

The Nomogram of Superstructure Icing Conditions for vessels encountering spray when heading into or abeam of the wind was utilized. Taking into consideration the water temperatures of +1°C, air temperature of -9°C and wind speed of 50 knots, it appears "THE MYERS III" would have accumulated heavy icing at a rate greater than 2.0

cm/hr. Such icing also reduces the VHF R/T operating range due to the insulating effect of icing on the antenna.

The following day heavy icing was evident on the hull and superstructure of the "BARRY & TRINA" while she remained aground. (See photograph on page 29)

The precautions to be taken by a vessel in case of icing is contained in the Canadian Coast Guard publication entitled An Introduction to Fishing Vessel Stability, TP 8161 and states in part:

Precautions

Special attention should be paid to the formation of ice on board. When the danger arises the following precautions should be taken:

1. All equipment for combating ice formation should be ready for use.

2. Fishing operations should cease. All fishing equipment on deck should be covered and secured. Any equipment that can be moved should, if possible, be placed below decks and secured.

3. Derricks and like gear should be stowed in the lowered position.

4. Fish boxes carried on deck should be constructed of a material impervious to water, such as fibreglass, and of a shape which would minimize ice accretion.

5. Lifelines should be rigged fore and aft, when crew members are working on deck. Safety harnesses should be worn.

6. Freeing ports should be kept clear.

7. Watertight doors, manholes and hatch covers should be battened down.

8. All emergency and lifesaving equipment should be ready for use.

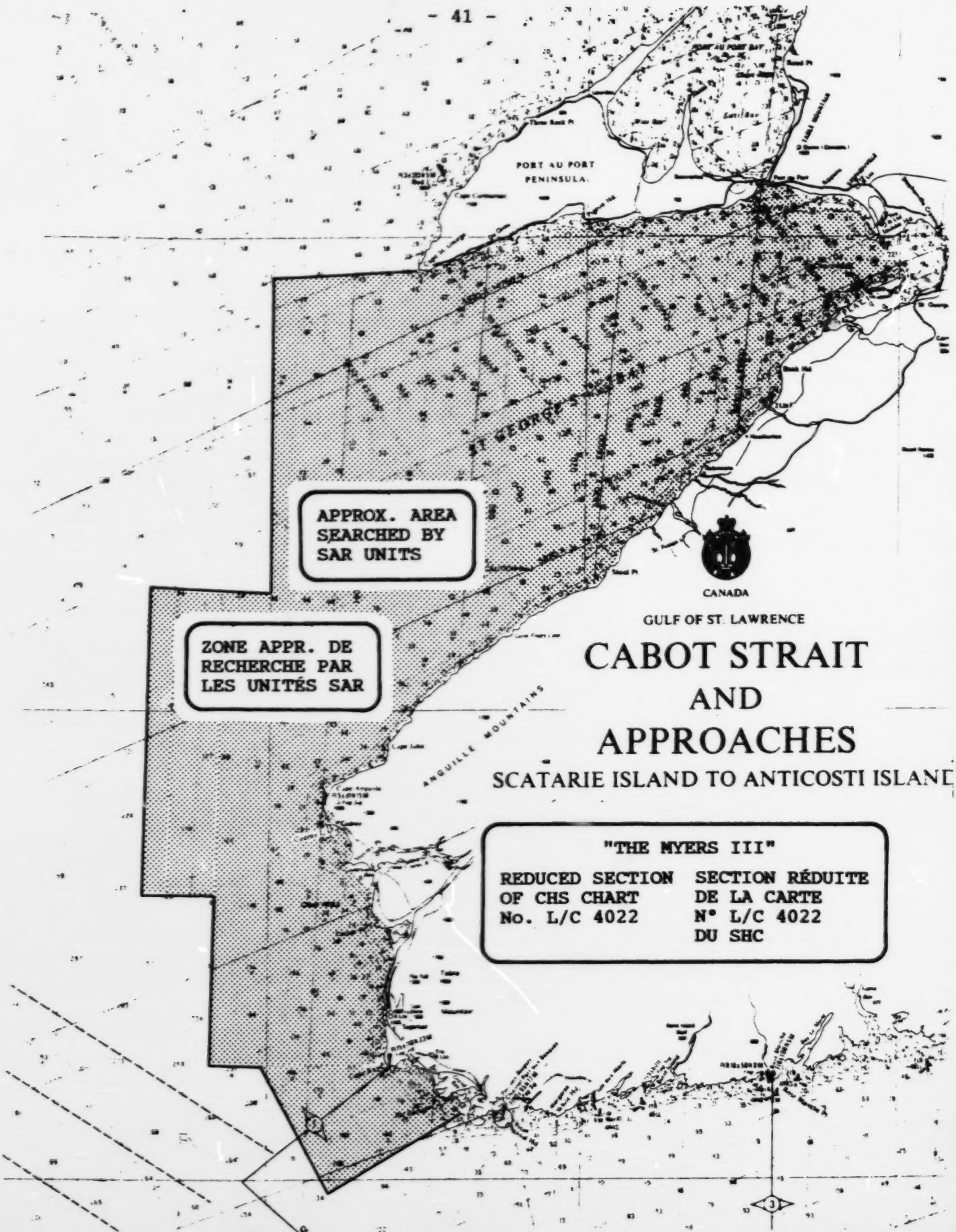
9. Each crew member should be warmly clothed.

10. Radio communications with shore and other vessels should be maintained.

4. Search and Rescue

On January 24, 1987 the fish plant manager at Codroy was attending some business at Burnt Island on the south-west coast of Newfoundland when he noticed the wind starting to freshen at about 1645. As the weather deteriorated he telephoned the Codroy fish plant at 1730 to ascertain the status of the fishing vessels in the area and was informed shortly after that " THE MYERS III" had not returned from the fishing grounds. He made several telephone calls to the fish plant to ascertain the whereabouts of " THE MYERS III", then he called the Port-aux-Basques VTS inquiring about the vessel but there was no available information. At about 1918, the Port-aux-Basques VTS received an inquiry from the FV "NORTHERN CHALLENGER" about " THE MYERS III" and at 1924 the fish plant manager reported that " THE MYERS III" was overdue and gave her description to the Port-aux-Basques VTS. The St. John's Marine Rescue Sub-Centre was advised at 1926 and the local RCMP were notified at 1945; both units were later informed of the "BARRY & TRINA" grounding. The weather reported at this time was westerly gales and zero visibility in blowing snow. The CCGS "JACKMAN" was tasked at 1936 and a General Marine Broadcast was initiated by RCC Halifax to be transmitted by Stephenville CGRS and VTS Port-aux-Basques on R/T and CW every two hours. A Buffalo aircraft was tasked from Summerside at 2205 and the research vessel "GADUS ATLANTICA" was tasked at 2249 followed by the fishing vessel "CAPE BRIER". Two more Search and Rescue aircraft were dispatched at 0221, January 25, 1987, one from Gander and the other from Summerside. However, both units could not get to the scene due to weather conditions. One waited at Deer Lake and the other at Grindstone.

In the meantime, the following fishing vessels participated in the search on January 25, 1987: "HILLSBOROUGH", "ZONNEMARIE", "CAPE LANCE", "A.W. HENRIKSEN" and "CAPE BEAVER". The Coast Guard Ship "TUPPER" was also tasked at 0419. The RCMP participated in the search and assisted in the rescue of the crew of the "BARRY & TRINA".


PORT AU PORT PENINSULA
ST GEORGE'S
APPROX. AREA SEARCHED BY SAR UNITS
ZONE APPR. DE RECHERCHE PAR LES UNITÉS SAR
CANADA
GULF OF ST. LAWRENCE
CABOT STRAIT AND APPROACHES
SCATARIE ISLAND TO ANTICOSTI ISLAND
ANGUILLE MOUNTAINS
"THE MYERS III"
REDUCED SECTION OF CHS CHART No. L/C 4022
SECTION RÉDUITE DE LA CARTE N° L/C 4022 DU SHC

The following is a resume of subsequent Search and Rescue activities:

- On January 25, 1987, at 1420, an aluminum boat and 4 personal flotation devices were found near Stormy Point and identified as belonging to "THE MYERS III". Nine vessels and two Buffalo aircraft searched an area of 200 square miles, including the shoreline, under restricted visibility, blowing snow and strong westerly wind 20-40 knots.

- On January 26, 1987, an intensive search of a 1200-square mile area was carried out by ten vessels and three rescue aircraft (two helicopters and one Buffalo). One body was located near the shore at Caplin Cove with various items of debris found ashore. All commercial vessels were released from the search at the end of daylight due to an approaching storm. The CCGS "JACKMAN" and "TUPPER" remained in the area.

- On January 27, 1987, the search commenced at first light by the two Coast Guard ships, two CMRA vessels and a rescue helicopter. The search encompassed 340 square miles. One body was recovered in Caplin Cove near Woody Cape and some debris was found. Vessels and aircraft stood down at dark.

- On January 28, 1987, the CCGS "JACKMAN" continued searching, assisted by two Search and Rescue helicopters, extending the search area from Cape Ray to Cape Anguille to Flat Island.

- On January 29, 1987, the search continued in Caplin Cove area using the CCGS "JACKMAN".

The full-scale search of the search area had been adequately covered by 17 SAR units, 6 of which were air resources and the remaining 11 were marine resources. After taking into consideration the overall SAR operations, RCC placed the search on 'reduced' status on January 29 and the case was handed over to the RCMP as the 'missing persons' case.

On January 30, 1987 ground searches were carried out by the RCMP and volunteers, as well as some fishing vessels. A police helicopter also searched the coastline.

On February 4, 1987 the Police helicopter conducted another search of the shoreline with negative results. RCMP continued to maintain random searches of the area.

There was no delay in relaying the initial information received from the Codroy fish plant Manager to Port-aux-Basques Traffic Centre and to Search & Rescue. The following resources were utilized by Search & Rescue:

Resources	Search Time	Transit Time	Total Time
Marine			
CCGS JACKMAN	62.7	14.6	77.3
CCGS TUPPER	42.2	8.2	50.4
MV GADUS ATLANTICA	39.3	3.7	43.0
FV CAPE BRIER	10.0	0.0	10.0
FV HILLSBOROUGH	36.9	2.4	39.3
FV CAPE LANCE	33.9	1.0	34.9
FV A.W. HENRIKSEN	33.1	1.0	34.1
FV ZONNEMARIE	36.0	2.5	38.5
FV CAPE BEAVER	30.6	2.0	32.6
CMRA FV WESTERN BRIDE	12.1	0.0	12.1
CMRA FV CORRINA MARIA	14.0	0.0	14.0
Air			
Rescue 301 Helicopter	2.2	4.0	6.2
Rescue 303 Helicopter	11.4	2.0	13.4
Rescue 306 Helicopter	1.0	2.3	3.3
Rescue 318 Helicopter	0.0	5.3	5.3
Rescue 5455 Fixed-Wing	5.8	3.8	9.6
Rescue 5457 Fixed-Wing	11.0	6.3	17.3
TOTAL	382.2	59.1	441.3

The SAR operation under the direction of RCC Halifax and MRSC St. John's was carried out for a period of five days. The RCMP helicopter searched the area after the search had been placed on 'reduced status' by the Rescue Co-ordination Centre, with negative results.

The following are the location and numbers of Canadian Marine Rescue Auxiliary vessels located on the West and South-west Coast of Newfoundland:

Location	No. of Vessels
Rocky Harbour	1

Trout River	1
Corner Brook	2
Port au Port	9
Highlands	2
Codroy	10
Margaree	1
Isle aux Morts	4
Rose Blanche	9
La Poile	1

The wreck of "THE MYERS III" was eventually located on May 26, 1987, on the bottom in position 47°51'.5 N., 59°23'.5 W., lying inverted in some 30 m of water.

Extensive search and rescue efforts by all SAR units that participated in the SAR operations for "THE MYERS III" and the successful evacuation of the crew from their stranded vessel the "BARRY & TRINA", under extreme bad weather conditions, is commendable.

CHAPTER 4

General Findings

- "THE MYERS III", heavily laden with fish, sank when she was suddenly overwhelmed by storm conditions.

- When the radome antenna of the "BARRY & TRINA" was blown off by storm force winds, the navigation equipment aboard the vessel commenced functioning erratically resulting in the skipper becoming disoriented and eventual grounding of the vessel.

- The weather forecasts issued predicted gale force winds which was subsequently upgraded to storm force but this upgrading came too late.

- The vessels were caught by the sudden storm force winds before being able to gain effective shelter.

- The majority of the fishermen did not hear the storm warning; however, they were aware of the forecast gale force winds of 30-40 knots.

- As neither the crew of "THE MYERS III" nor the crew of the "BARRY & TRINA" were experienced in the weather conditions off Codroy or the approaches to the harbour, they were unaware of the heavy confused seas generated in this area by the stormy weather.

- When fishing is good, a good catch of fish induces in the fishermen a disregard for safety factors.

- Whilst the "BARRY & TRINA" was prudent in unloading her initial catch of fish prior to resuming fishing operations, "THE MYERS III", despite being heavily laden, continued to fish.

- A tendency by fisherman not to pay adequate attention to the weather conditions in deciding a safe load, is a dangerous practice.

- The closeness of the fishing grounds to the harbour induces in fishermen a false sense of security.

Other Findings

Most vessels heeded the warning of gales for later on in the afternoon of February 24 and returned to port before that time.

The air, marine, RCMP and volunteer crew carried out an extensive search under extreme weather conditions and are to be commended for their efforts.

Glossary

AST	Atlantic Standard Time
CCG	Canadian Coast Guard
CCGS	Canadian Coast Guard Ship
CMB	Continuous Marine Broadcast
CMRA	Canadian Marine Rescue Auxiliary
CW	"Continuous Wave" radio frequency, Morse Code
FV	Fishing vessel
MRSC	Marine Rescue Sub-Centre is established for the purpose of co-ordination conducting and controlling response to marine SAR incidents within the boundaries of local Search and Rescue Region, using local knowledge and resources in providing effective response
MV	Motor vessel
PFD	Personal Flotation Device
RCC	Rescue Co-ordination Centre
R/T	Radiotelephone
Scupper	A drain set in a deck to carry off the accumulation of rain or sea water
UTC	Co-ordinated Universal Time
VHF R/T	Very High Frequency Radiotelephone
VTS	Vessel Traffic Services

ANNEX I

CANADA SHIPPING ACT

Life Saving Equipment Regulations

REGULATIONS RESPECTING LIFE-SAVING EQUIPMENT

Short Title

1. These Regulations may be cited as the *Life Saving Equipment Regulations*.

SCHEDULE III

(s. 2 and Sch. XV)

SHIPS DISTRESS SIGNALS

8. No distress signal shall be considered as meeting the requirements of this Schedule if four years or more have elapsed since the date of manufacture.

SCHEDULE XI

(s. 2)

LIFE RAFTS

1. (3) Inflatable life rafts shall be tested annually in such manner as the Board may require and in accordance with Schedule XVII and shall carry a log card in an accessible position, signed by an approved person, certifying that such inspection has been properly carried out, and the date thereof, and showing the class of pack that is carried in the life raft.

APPENDICE I

LOI SUR LA MARINE MARCHANDE DU CANADA

Règlement sur l'équipement de sauvetage

RÈGLEMENT CONCERNANT L'ÉQUIPEMENT DE SAUVETAGE

Titre abrégé

1. Le présent règlement peut être cité sous le titre: *Règlement sur l'équipement de sauvetage.*

ANNEXE III

(art. 2 et ann. XV)

SIGNAUX DE DÉTRESSE DES NAVIRES

8. Aucun signal de détresse vieux de plus de quatre ans à compter de la date de sa fabrication, ne sera jugé conforme aux prescriptions de la présente annexe.

ANNEXE XI

(art. 2)

RADEAUX DE SAUVETAGE

(3) Les radeaux de sauvetage pneumatiques devront être éprouvés annuellement de la manière que pourra exiger le Bureau et conformément aux prescriptions de l'annexe XVII et porter, dans une position accessible, une fiche de bord signée par une personne autorisée, attestant que cette inspection a été dûment effectuée, donnant la date de cette inspection et indiquant la classe de la trousse de secours que porte le radeau de sauvetage.

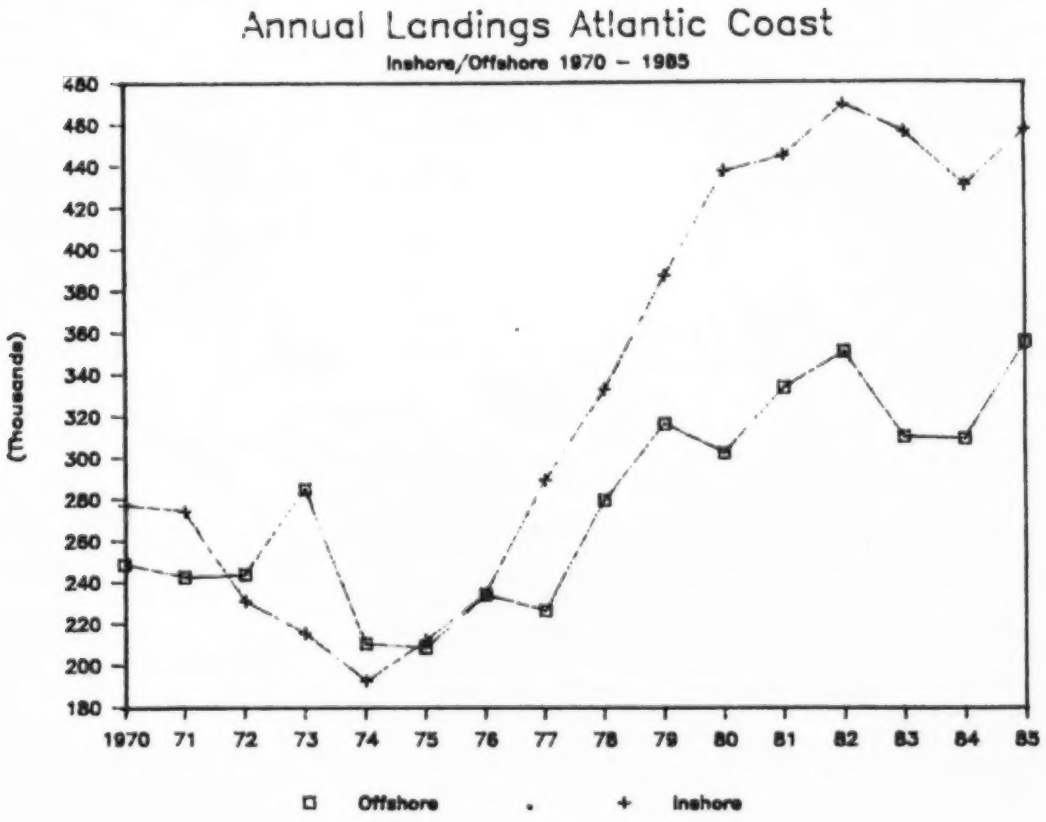
ANNEX II APPENDICE II

Canadian Groundfish Inshore/Offshore* Allocations 1985 - 1987
Allocations canadiennes cotieres et hauturiere* 1985 - 1987

Species/ Especes		1985	1986 [1]	1987
Cod/ Morue	Inshore/cotiers	357,650	333,991	313,570
	Offshore/hauturiere	207,285	197,161	187,685
Haddock/ Aiglefin	Inshore/cotiers	20,050	23,450	16,630
	Offshore/hauturiere	19,950	13,650	10,820
Redfish/ Sebaste	Inshore/cotiers	20,640	21,640	20,140
	Offshore/hauturiere	114,230	118,650	116,750
American Plaice/ Plie canadienne	Inshore/cotiers	18,330	18,900	18,212
	Offshore/hauturiere	54,560	59,900	53,688
Yellowtail/ Limande jaune	Inshore/cotiers	---	---	---
	Offshore/hauturiere	17,630	17,630	17,630
Witch/ Plie grise	Inshore/cotiers	3,000	3,000	3,000
	Offshore/hauturiere	9,790	10,590	9,790
Flounder/ Flets	Inshore/cotiers	5,400	5,400	5,400
	Offshore/hauturiere	8,350	8,350	8,350
Greenland Halibut/ Fletan du groenland	Inshore/cotiers	35,500	41,600	44,100
	Offshore/hauturiere	28,000	30,700	30,700
Pollock/ Goberge	Inshore/cotiers	18,650	21,200	23,000
	Offshore/hauturiere	23,750	18,800	21,500

* Inshore - vessels less than 100'; Offshore - vessels greater than 100'
cotiers - bateaux de moins de 100'; hauturiers - bateaux plus grands que 100'

1 Year end allocations including transfers/



Annual Groundfish Landings (mt) Atlantic Coast (1970-1985) for Vessels Over & Under 100 feet
Debarquements annuels de poisson de fond (tm), cote de l'Atlantique (1970-1985) bateaux plus petits et plus que 100 pieds

Year	100 ft. & over/ 100 pi. et plus	Under 100 ft./ moins de 100 pi.	Total
1970	248,490	277,060	525,550
71	242,335	273,863	516,198
72	243,645	230,695	474,340
73	284,587	215,404	499,991
74	210,467	192,646	403,113
75	208,490	212,402	420,892
76	234,122	234,544	468,666
77	226,303	289,051	515,354
78	279,410	332,642	612,052
79	315,950	387,409	703,359
80	302,021	437,774	739,795
81	333,559	445,177	778,736
82	350,697	469,633	820,330
83	309,842	456,291	766,133
84	308,684	430,822	739,506
85	355,216	457,344	812,560